Channel Mitigation Monitoring Sheets I, II, III, AND IV

Monitoring Data Record

Project Title: R-2417BB (Site 6) COE Action ID: 200201326
Stream Name: DWQ Numbers: 3378
City, County and other Location Information: Lee County, Sanford Bypass (Sta. 540+20 to 555+00 –L- RT.)
Date Construction Completed: Water was turned into the stream in Oct. 2006. Streambank reforestation was completed in Jan. 2007.
Monitoring Quarter: (7) of 8
Ecoregion: 8 digit HUC unit: 03030004
USGS Quad Name and Coordinates:
Rosgen Classification:
Length of Project: 1,734' Urban or Rural: Rural Watershed Size:
Monitoring DATA collected by: J. Young Date: 11/17/08
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Rd. Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (**1**) ~~2~~ ~~3~~
Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: The permittee will visually monitor the vegetative plantings on all mitigation streambanks to access and insure complete stabilization of the mitigation stream segments. This monitoring will include adequate visual monitoring of planted vegetation quarterly for a minimum of two years after final planting, and appropriate remedial actions (e.g., replanting, streambank grading, ect.). If within any monitoring year, bank stabilization is not acceptable as determined by the Corps of Engineers, and remedial action required by the Corps of Engineers is performed, the two year monitoring of the affected portions of the stream will begin again.

Section 1. PHOTO REFERENCE SITES

Total number of reference photo locations at this site: 9 photo point locations – 2 photos taken from each location
Dates reference photos have been taken at this site: 5/21/07, 8/7/07, 11/2/07, 2/1/08, 5/13/08, 8/8/08, 11/17/08

Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference:

If required to complete Level 3 monitoring only stop here; otherwise,

Section 2. PLANT SURVIVAL
Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:

ADDITIONAL COMMENTS: Planted live stakes and bareroot seedlings noted on the streambank and in the floodplain consisted of black willow, silky dogwood, river birch, black cherry, water oak, and willow oak. Other herbaceous and woody species noted were *Juncus* sp., sedge, woolgrass, fennel, goldenrod, pine, pokeberry, *Scirpus* sp., clover, ragweed, alder, sweetgum, tulip poplar, sycamore, red maple, and cattail.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

This is the 7th quarterly monitoring evaluation for this stream relocation. The crossvane @ Sta. 546+75 (PP #6 Upstream) that required remedial action prior to the 4th Quarter evaluation is functioning properly at this time. The stream relocation is highly stable. NCDOT will continue to monitor this stream relocation.

Date	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

Site 6

Photo Point #1 (Upstream)

Photo Point #1 (Downstream)

Photo Point #2 (Upstream)

Photo Point #2 (Downstream)

Photo Point #3 (Upstream)

Photo Point #3 (Downstream)

Site 6

Photo Point #4 (Upstream)

Photo Point #4 (Downstream)

Photo Point #5 (Upstream)

Photo Point #5 (Downstream)

Photo Point #6 (Upstream)

Photo Point #6 (Downstream)

Site 6

Photo Point #7 (Upstream)

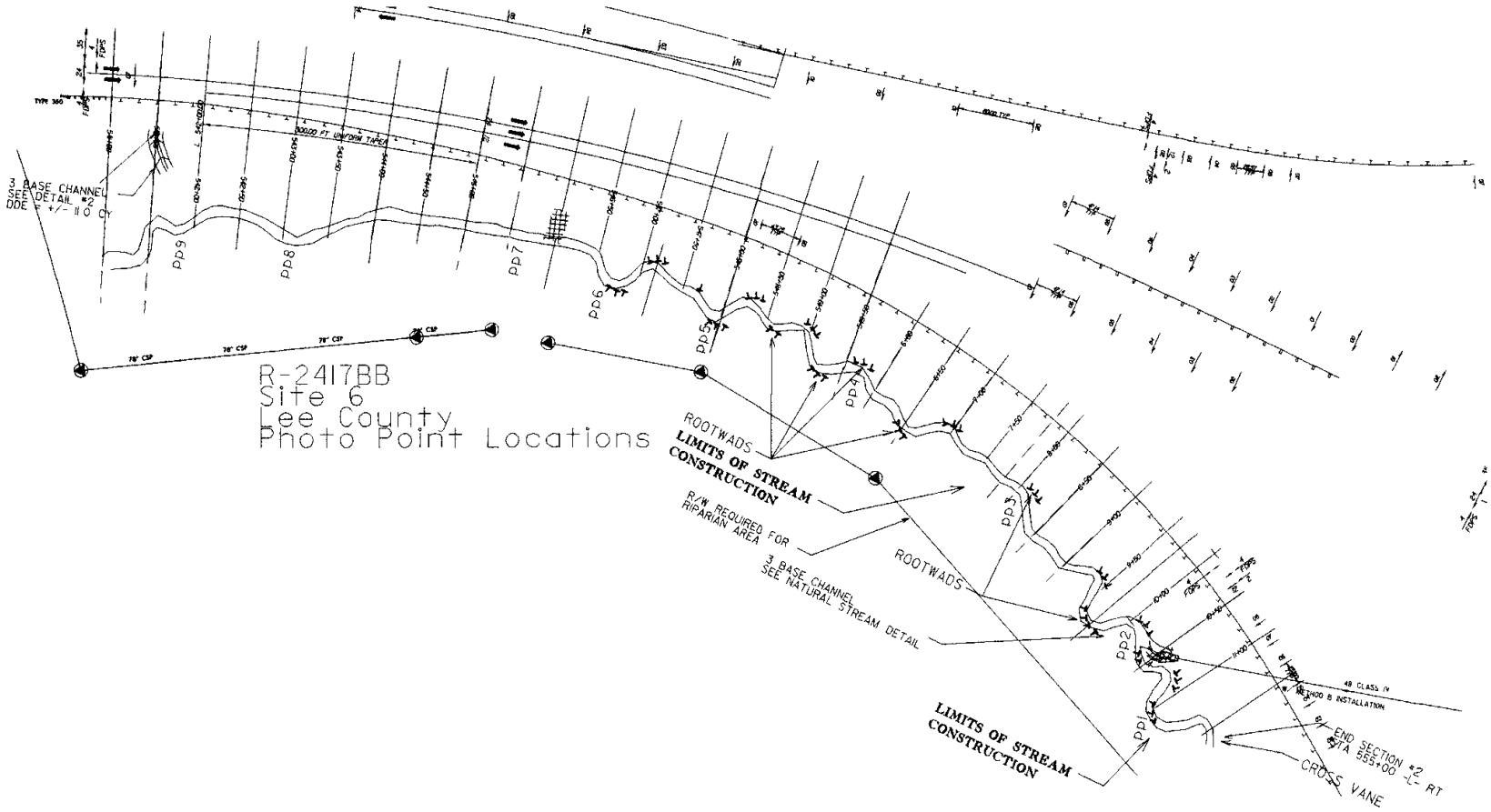
Photo Point #7 (Downstream)

Photo Point #8 (Upstream)

Photo Point #8 (Downstream)

Photo Point #9 (Upstream)

Photo Point #9 (Downstream)


R-2417BB
Site 6
Lee County
Photo Point Locations
3 BASE CHANNEL
SEE DETAIL #2
DIE +/- 110 CY
pp9
pp8
pp7
pp6
pp5
pp4
pp3
pp2
pp1
ROOTWADS
LIMITS OF STREAM CONSTRUCTION
R/W REQUIRED FOR RIPARIAN AREA
3 BASE CHANNEL
SEE NATURAL STREAM DETAIL
ROOTWADS
LIMITS OF STREAM CONSTRUCTION
END SECTION #2
STA 555+00 -L- RT
CROSS VANE